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Post-Truth Overexposure: Media Consumption and Confidence in Institutions

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ABSTRACT

Does increased consumption of media affect how the public views the institutions of government and media? This study analyzes the relationships between time spent consuming television and Internet, where a respondent gets their news from (television vs. Internet), and confidence in these institutions. I predict an inverse relationship between exposure to television and Internet and confidence in media and government. I further hypothesize that people who get their news primarily from the Internet have less confidence in these institutions than those who get their news from television. I test this relationship using a sample of 370 respondents from the 2016 General Social Survey (GSS) dataset, controlling for race, gender, political views, education, respondents' family income at the age of 16, and age. OLS regression analysis shows that more hours spent watching television positively impacts confidence in media, and that those who get their news from the Internet have less confidence in the media, as do conservatives, regardless of media consumption. No independent variables determine confidence in government, which is only associated negatively with being conservative. A second regression model using confidence in press instead of media shows that females are significantly less likely to trust the press and that people of color are significantly more likely to trust the press. The relationships from the first model retained their significance. This model shows a higher significance level for the conservative relationship. These differences are discussed along with recommendations for further research.

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The liberal-conservative political division in the United States is vaster than ever before. This political division coincides with the rise of the Internet and Internet news amongst a general increase in news outlets and organizations. Internet news can be a great utility in the efforts to disseminate information, but it can also be counterproductive to the very same cause. In this politically polarized era, it can be very advantageous for news organizations to form around and cater to specific political views. In addition to the biased political news that can come out of these sources, their political skews can affect the quality of information in such a way that one could read articles from two politically opposed news sources and see two different stories regarding the same event. There are not nearly as many TV news stations as there are Internet publications, but there are politically biased news stations that seem to maintain a regular audience nonetheless, and these news stations can have serious influence on public opinion (Morris 2007).

However, in recent years it the causal direction of this influence has come into question. Recent theory and studies have suggested that perhaps people choose the media they want to see based on preexisting social group identifications and behaviors (Gunther 1992; Bennett and Iyengar 2008; Tsfati 2010).

This new landscape of media effects in our society is an important field to understand. This is especially true of understanding Internet news and its impact on society, as younger, educated people are getting their news from the Internet than from television (Mary and Joshi 2017). Despite the knowledge that media can have direct and powerful effects on public opinion (Payne 1978), sociological studies have yet to

investigate the specific issue of public confidence in relationship to these news media. In the modern day of "fake news" there is a noticeable shift in the way that people interact with politics. This is an important issue to address, especially now, when the public's confidence in the press is at an all-time low, with only 8 percent of people reporting a great deal of confidence in the press (figure 1). Understanding how the polarized state of news media and filter bubbles affect the public's confidence in institutions such as the media and government is essential to understanding how the changing face of news media influences people and how it ties into the various theoretical frameworks of media effects theory. This study also explores the interaction of groups, racial, gender, age, and class stratification in relation to the primary problem of media consumption and confidence.

The primary question in this study endeavors to explore the relationship between where people get their news, how much time they spend on the relevant media, and how their confidence in the press and government is consequently affected. Specifically, the questions this study hopes to answer are as follows: 1) Is there a relationship between confidence in press and/or government and the frequency of news media consumed? 2) Does one particular medium (TV or Internet) have a more significant effect on skepticism/public confidence?

Additional investigations will be made into a series of variables that could potentially moderate or mediate these relationships, such as race, gender, age, income, education, and political views.

I expect to find that there is an inverse correlation between media exposure and confidence in the press/government. Furthermore, I predict that the Internet as a medium

is more responsible for this lack of confidence than television. Specifically, I

hypothesize that people who spend more time watching television or using the Internet

will have less confidence in the press and government. I also hypothesize that Internet

usage will have a stronger influence than television on public confidence in media and

government.

THEORY

This study serves to test and inform the minimal effects theory of media

influence. First conceptualized in the 1940's (Lazarsfeld, Berelson, and Gaudet 1948;

Katz 1957; Bennett and Iyengar 2008), this theory posit that the media's effect on society

is not a direct effect, but was in fact mediated by other social factors, specifically social

group identification.

One of the major models of early minimal effects theory was known as the "two-

step flow of communication" (Lazarsfeld et al. 1948; Katz 1957:61; Bennett and Iyengar

2008). This model suggests that Ideas are first transferred from media to "opinion

leaders" (Lazarsfeld et al. 1948; Katz 1957:61), figures with significant influence in their

social groups. These opinion leaders then disseminate their interpretation of the

information they receive from the media to others within their communities, people who

are supposedly less news savvy or involved who are influenced by said opinion leaders.

This theory was developed throughout the 1940's and 50's before it had to contend with

the strong effects theory, a theory that claims a more direct relationship between media

and the individual. This theory came about with the rise of television and so-called

"mass media" the institution of mainstream media dominated by a smaller number of

easily accessible news sources (Bennett and Iyengar 2008).

The strong effects theory, however, seems to have lost its credibility with the rise of cable television and Internet, and in a 2008 article published in the *Journal of Communication*, Bennett and Iyengar claim that the era of strong effects is over. They do not, however, return to the two-step flow of communication model of the mid-20th century. Instead, they suggest that social change necessitates a new minimal effects model. They argue that the minimal effects theory is still relevant, but that the two-step flow model is outdated (Bennett and Iyengar 2008). The writers (2008) argue that the two-step model originates from an era of a "premass communication media system and relatively dense memberships in a group-based society" (707), where people were members of more tight-knit social groups united around institutions such as "political parties, churches, unions, and service organizations" (707). They further argue that mass media has disappeared, but that old minimal effects models no longer apply due to a significant decrease in group cohesion from the 1940's. Additionally, unlike the media situation in the 1940's, it is now easier than ever before to connect with news and other media. Keeping these two factors in mind Bennett and Iyengar claim that "As receivers exercise greater choice over both the content of messages and media sources, effects become increasingly difficult to produce or measure in the aggregate while creating new challenges for theory and research" (2008:708). This is just one of the theories rising to the challenge of establishing the new media effects models for the 21st century, and a new adaptation of minimal effects theory is by no means a widely accepted solution (Holbert, Gerrett, and Gleason 2010).

In a response to Bennett and Iyengar (2008), Holbert, Gerrett, and Gleason (2010) argue that the writers were too quick to dismiss certain elements of communication and

media effects theories and models. Their primary criticisms of the paper include

negligence towards models such as the Elaboration Likelihood Model (ELM), a model

designed to explain the ways in which individuals process and are persuaded by various

stimuli through peripheral and central routes of reception (2010). They also suggest that

Bennett and Iyengar (2008) asserted too confidently the degree to which individuals

avoid information that contradicts their beliefs (Holbert et al. 2010). The authors of this

response are skeptical that "media elites" (2010:26) have lost as much influence as

Bennett and Iyengar (2008) seem to believe. They posit that media elites still have a

great deal of control over the dissemination of information (Holbert et al. 2010).

LITERATURE REVIEW

With the rise of the digital age, scholars are arguing many different media effects

theories and models, and there is no clear answer in sight. In this section, we will

examine the research that has focused on these theories, and how certain functions of the

Internet make it a wholly different medium than any other news media. We will also

expand into a more specific focus of this study–confidence in institutions. Given the

current political climate in America, it is important to examine how the media influences

the people, and how that influence and others can affect people's confidence in media

and government.

Media Influence

The rapid increase in media has changed the way that society interacts with it and

is influenced by it. However, studies still show some hints of legitimacy in the strong

effects claim at a glance (Payne 1978; Hoffman and Wallach 2007). These studies show the effects of media in very specific situations. For example, subjects might have to read articles from a specific source of point of view before their opinions are noted (Hoffman and Wallach 2007), or watch one source of news per studied group to gauge the influence of the news (Payne 1978). This method stands in opposition to the fact that people tend to choose their media based on their beliefs (Bennett and Iyengar 2008; Tsfati 2010; Flaxman, Goel, and Rao 2016). While these studies still show results that are consistent with the ideas of strong media effects, they are flawed in the sociological sense. This is because they are done in an environment where the agency of the subjects is restricted or removed entirely. These studies may show significant strong media effects, but only because the subjects are only given one source of information that they cannot choose. There are some very important cases of these strong effects functioning effectively in more subtle ways. For example, radio content has influenced strikes and protests in the past (Roscigno, Danaher, and Summers-Effler 2001). However, these so-called "strong effects" occurred more often in the twentieth century, before the media boom at the turn of the century.

In society, where people have agency to choose their news source, results are seldom so clear. Certain media platforms do increase ideological segregation (Flaxman, 2016), but the conclusions of these kinds of studies do not necessarily establish the same causal direction as those that support the strong effects theory. A study on the effect of Internet media showed definitive increase in the "mean ideological distance between individuals" (Flaxman et al. 2016:298), but even these studies show that the increase is moderate at best. One thing that this study points out is that individuals tend to read

publications that express views that align with their own outlooks. In this sense, the results of this study speak more to the idea of a new minimal effects model than a model of strong media effects, in the sense that the media is not influencing the individual so much as the individual is choosing which media to accept and receive.

There are, however, some news organizations that are a greater influence than others, and it has been shown that certain news giants (such as Fox News) have audiences that exhibit very similar behaviors and attitudes regardless of individual variation in political views (Morris 2007). Although these effects do not extend beyond mainstream media. Their existence within mainstream media is surprising, given the fact that the perception of bias separating mainstream news outlets is massively exaggerated. In reality these outlets are not really as different or polarized as people think, and generally tend to run the same stories (Budak, Goel, and Rao 2016).

However, the changing face of news media and the shifts in how it interacts with the public bring about a new topic of discussion in the news world–how are people effecting media? In the past, this was not an issue in question, as the mass media consisted of a handful of larger networks that broadcast across television and radio, mediums that don not necessarily facilitate active audience participation or feedback. In addition to the rise of the Internet changing the way people interact with and consume news, news companies also have to deal with broader competition, the same kind of competition that is fragmenting media and bringing down mass media as an institution (Bennett and Iyengar 2008). The resulting problem is financial–how do these old news monoliths find new ways to make enough money to stay relevant and influential?

Predictive Algorithms in Internet Media

One important new tool for online news outlets is the predictive algorithm. In contrast to the old idea of journalistic gatekeeping, in which journalists and editors would choose what stories to write and publish (Pariser 2011), the Internet brings a new autonomous gatekeeper into the world of media–the predictive algorithm.

Unlike human gatekeepers, predictive algorithms are not concerned with any sense of public duty. Rather, they recommend or automatically filter/post the stories that seem to have the most promise in attracting traffic to the website (Pariser 2011; Tandoc 2015; Flaxman et al. 2016). In the changing landscape of media, many companies that are struggling to keep pace rely on predictive algorithms to make sure that they get enough web traffic to be financially self-sufficient (Tandoc 2015), although mainstream news sites are not the only online news sources taking advantage of predictive algorithms, which have turned out to be very popular.

This is a known fact in the public conscience. Most people doubt that social media sites do a good job of getting rid of fake news (Newman et al. 2017). However, people tend to disregard the apparent reliability of news sites if they are more convenient to access (Tsfati and Capella 2003).

News websites are not the only online business using predictive algorithms, either. In a 2011 TED talk, Eli Pariser coined the term "filter bubble." This term refers to the figurative bubble individuals find themselves in online, where they are only exposed to media that shares their views (Pariser 2011). Filter bubbles are all over the Internet and are very difficult to notice once they are implemented. The idea of the filter bubble is to surround individuals with links that they will want to click on. This seems

like an excellent idea in theory, and it certainly is an effective business plan, but it poses

a problem for media consumption, specifically in the news. Filter bubbles are affecting

the online experience of everyone who frequently uses the Internet. These bubbles are

the result of multiple predictive algorithms working in unison (inadvertently) to erase any

views or voices that oppose your outlook on the world. In his talk, Pariser (2011) pointed

out the removal of opposing political views from one's Facebook home page, as well as

the fact that the same Google search will yield different results for different people. This

omnipresence of predictive algorithms and systems mean that the idea of an objective

Internet is completely unrealistic.

Confidence in Media, Government, and Other Institutions

Confidence in media has been on the decline since the 1990's (Gronke and Cook

2007), and confidence in government has been dropping since as early as the 1970's

(Johnson and Kaye 2015). Despite the large percentage of people who get their news

from television, people generally consider this news to be of poor quality (Claussen

2004).

There are numerous variables and qualities that contribute to lack of confidence in

these institutions. Some of these variables are institutional themselves. Within news

organizations that may have started life as generally objective publications,

organizational issues, such as friction between reporters and editors or executives can

result in a bias forming within the news organization (Sigelman 1973). Media bias has a

serious influence on public perception of current events and institutions, as well as

perceived trustworthiness of government and media. The critical lens of news media can

result in a decrease of confidence in the government, as bias is expressed as criticism of opposition rather than reinforcement of the ideals of the group (Budak et al. 2016). Other research on news consumption and confidence in the media shows a negative association between media skepticism and mainstream news exposure. However, these studies also found a positive association between media skepticism and nonmainstream media exposure, implying that those who do not trust the media do not expose themselves to it (Tsfati and Capella 2003; Tsfati 2010). This is in line with the thoughts of Bennett and Iyengar (2008). These conflicting findings will be interesting to keep in mind when studying the effect of Internet exposure on confidence in the government and media, as news sources found online can vary greatly from the reporting standards and styles of more traditional mainstream news.

The world of Internet media and its relationship with confidence in the institutions in question is arguably much less straightforward than the relationship between confidence and television consumption. Online news and social media platforms are so different from each other that different online media platforms have different effects on public confidence in government and media (Johnson and Kaye 2015). Specifically, their study (2015) found that blogs and YouTube are associated with reduced confidence in government, congress, and the news media, while use of social network sites and Twitter lead to increased confidence in these institutions.

Similar to media bias, politicization of news plays a large part in swaying the confidence of the people. For example, when the media politicizes health issues in news, the result is often a decreased lack of confidence in medicine *and* government (Fowler and Gollust 2015). Furthermore, research shows that an individual's political affiliations

can affect their confidence in media, with a noted negative attitude amongst

conservatives (Gunther 1992; Morris 2007). In addition to political affiliation, other

demographics, such as race, have been shown to affect confidence in government (Wilkes

2015).

The study of media effects is not a new concept. However, in the information

age, it is necessary to consider new ideas about how media interact with the public and

vice versa. In a time where confidence in media and government have been on the

decline for some time, it is also important to consider the possible causes of this loss of

faith, not only to understand the cause but to gain insight into a possible solution. This

study intends to make tentative steps into the realm of new media effects, where it will

hopefully reveal connections and relationships that will be constructive to the field.

METHODS

Data

This study uses the 2016 General Social Survey (GSS). The survey is conducted

via face-to-face interviews[1] every two years by the National Opinion Research Center

(NORC), and gathers data from a national probability sample of non-institutionalized

residents of the United States, ages 18 and up. Every survey conducted reaches between

1,400 and 3,300 people. This study uses the 2016 GSS survey data, specifically, which

surveyed a sample of 2,861 people (Smith et al. 2016). The response rate for the 2016

survey was 61.3 percent (Smith et al. 2016: 3129). This is a fairly low response rate for a

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[1] While interviews are mostly carried out face-to-face, some interviews are done over the phone or with computer assistance (Smith et al. 2016). For further information on data collection, visit the GSS website at http://gss.norc.org/

GSS survey. Of the 2,861 respondents, this study takes a sample of 370. The 370

respondents in the sample of this study are those respondents who answered all of the

questions in this study and fell within the parameters of the subset (discussed below).

Independent Variables

The independent variables of this study concern media consumption.   The three

survey questions used in this study are hours of television consumed per day,

hours/minutes of Internet consumed per week, and where the respondent gets their news

(TV or Internet).

Hours of television consumed per day (tvhours) and hours/minutes of Internet

consumed on average per week (wwwhr and wwwmin, respectively) are both interval-

ratio variables. When asking a respondent about their television consumption, the

interviewer asks, "On the average day, about how many hours do you personally watch

television?" Internet usage is measured in hours per week, and excludes time spent on

email. The question is phrased, "Not counting e-mail, about how many minutes or hours

per week do you use the Web? (Include time you spend visiting regular web sites and

time spent using interactive Internet services like chat rooms, Usenet groups, discussion

forums, bulletin boards, and the like.)" This variable will have to be recoded such that the

total time per week on the Internet can be recalculated into time spent on the web per day.

When asking a respondent about their primary source of news (newsfrom), the

interviewer asks, "We are interested in how people get information about events in the

news. Where do you get most of your information about current news events –

newspapers, magazines, the Internet, books or other printed materials, TV, radio,

government agencies, family, friends, colleagues, or some other source?" This variable

was recoded into three separate variables. The first recoded the responses into three

categories: TV, Internet, and other. The second variable made was a dummy variable for

TV as a primary news source, and third was the same dummy variable made for Internet

as a primary news source.

Dependent Variables

The dependent variables are from the set of confidence variables, including the

degree of confidence the respondent has in government (legislative, judicial, and

executive variables will be combined to represent overall confidence in government) and

the press (a combination of press and TV confidence variables). These variables are

ordinal, and follow the same question format: "I am going to name some institutions in

this country. As far as the people running these institutions are concerned, would you say

you have a great deal of confidence, only some confidence, or hardly any confidence at

all in them?" In their original coding, the possible values for these questions were 1: a

great deal of confidence, 2: only some confidence, and 3: hardly any confidence.

Control Variables

Control variables are crucial to this study, as there is no way to measure or define

a baseline level of confidence in these institutions. For example, people of ethnic

minorities may already have a low confidence in institutions that have/continue to

discriminate against them. Furthermore, it has been shown that women are less featured

in/catered to by news media (Shor et al. 2015). For this reason, it is necessary to control for as many social factors as possible.

Race can be easily controlled for by using the race variable from the GSS, in which respondents are asked, "what race do you consider yourself?" The answer is recorded nominally as one of three values: white (1), black (2), or other (3). Age is equally simple, although it is an interval-ratio variable measured in years. The variable for gender is labeled as sex in the GSS, and is a binary nominal variable, with the only two values being male (1) and female (2). Unfortunately, this prevents us from controlling for non-traditional gender identities that may have less trust in institutions for similar reasons as ethnic minorities. However, it would not be guaranteed that there would be a large enough sample of people who do not identify as either male or female. The relatively small population proportion of this group might make it difficult to control for even if the information was available.

Wealth is another factor that may contribute to trust in institutions. Wealthy people may have better educational backgrounds and better access to news, as well as educated family. This could allow people from wealthier backgrounds to be better informed and more knowledgeable of the stratification and potential inaccuracies of news media, leading them to place less trust in the news. I have decided to use the income variable that measures the relative income of the respondent's family when they were 16 years old (incom16). I elected to use this variable instead of the personal income variable because it is more indicative of economic background, which will be a better representation of access to education, resources, and an implication of parent's education. The question for this variable is phrased as follows: "Thinking about the time when you were 16 years old,

compared with American families in general then, would you say your family income was--far below average, below average, average, above average, or far above average?" Far below average is coded as 1, below average is 2, and so on. Far above average is coded as 5.

To further control for awareness and access to information, this study uses the education (educ) variable in the GSS. The education question is asked in multiple parts, and is listed on the GSS website as follows: "**A.** What is the highest grade in elementary school or high school that (you/your father/ your mother/your [husband/wife]) finished and got credit for? **B.** Did (you/he/she) ever get a high school diploma or a GED certificate? **C.** Did (you/he/she) complete one or more years of college for credit--not including schooling such as business, college, technical or vocational school? How many years did (you/he/she) complete?" This information is recorded as an interval-ratio variable with values between 0 and 20 years of education. Similarly to the wealth variable, this variable controls for access to information and how a respondent might interact with news media.

The final control variable used in this study is the political views (polviews) variable. This control ensures that there is no difference in baseline confidence in institutions within the liberal or conservative ideologies and, if there is a disparity, it will allow us to account for that disparity. Political views are listed on an ordinal spectrum with the values of: extremely liberal, liberal, slightly liberal, moderate, slightly conservative, conservative, and extremely conservative. The interviewer asks, "We hear a lot of talk these days about liberals and conservatives. I'm going to show you a seven-point scale on which the political views that people might hold are arranged from extremely liberal--

point 1--to extremely conservative--point 7. Where would you place yourself on this scale?" This variable holds promise for exposing another major indicator of confidence, and I expect to see a difference in which institutions liberals and conservatives trust.

Creation of Subset

In order to assure that only the most testable cases were included in the sample, a subset had to be made. The parameters I settled for were simple enough to maintain a reasonable number of cases while eliminating cases that might have skewed the study unfairly. The subset I created is one that only includes those respondents who either use a computer or have mobile internet access. One variable which is necessary in narrowing the sample to one of relevance to this study is the question of access to a computer. I used the variable regarding usage of a computer (compuse) as a reference in this study for eliminating cases that were not relevant to this study. The question for this variable is phrased as such: "Do you personally ever use a computer at home, at work, or at some other location?" Additionally, I used the question about access to Internet on one's mobile device (webmob), as many people in the U.S. now consume Internet media on other devices than a computer. The surveyor asks the respondent "Do you have access to the Internet or World Wide Web in your home through an Internet-enabled mobile device like a smart phone, PDA, or BlackBerry?" Respondents that answered no to both of these questions were eliminated from the study's sample.

While I originally intended to include those who did not have web access in the sample, the sample becomes fairer and more realistic when eliminating these cases. It is true that the parameters for this subset do eliminate many older people--who do not have

access to these technologies--within the GSS sample, and cause a noticeable shift in certain variable frequencies, such as news source and time spent online. However, these subset parameters do ensure one critical unifying characteristic amongst all cases in this study--all respondents within the study's sample have the agency to get their news either from television or the Internet. This subset does change certain aspects of the sample demographics, however (table 1). For example, the age distribution skews younger, and the proportion of respondents who get their news from the Internet increases accordingly.

Recoding

In order to transform these variables into usable variables for this study, some recoding was necessary. First, I dummied the race variable (0=white, 1=people of color) along with the sex variable (0=male, 1=female). All other control variables were suitable to use in their original forms.

For the independent variables, I recoded Internet hours per week into Internet hours per day. To achieve this, I combined the variables Internet hours per week and a computed iteration of Internet minutes per week (divided by 60 to equate to a fraction of an hour), to form a total Internet time per week variable. To find the average time spent online per day (in hours), I divided this variable by 7.

I recoded the news source variable into three separate variables for analysis in this study. The first is a nominal variable that contains three categories of news source: TV (1), Internet (2), and other sources (3). The second two are dummy variables–one for television (TV=1, else=0) and one for Internet (Internet=1, else=0).

I reverse-coded all of the dependent confidence varibles to express confidence as an ascending scale as opposed to a descending scale, such that a positive correlation did not manifest itself as a negative correlation in the analysis. Furthermore, I combined confidence variables concerning congress, the president, and the Supreme Court to make a variable for confidence in government (congvt), while also combining the press and television confidence variables were to create a confidence in media variable (conmedia). The values in these new confidence variables have changed from their original 3 option ordinal values into interval ratios between 1 and 3, 3 indicating the most confidence and 1 indicating the least amount of confidence a respondent can have.

All missing data was removed from this study. After deleting all missing cases, the remaining sample size was 370 respondents.

FINDINGS

Univariate Findings

Dependent Variables. The data in figure 1 shows the distribution of news sources that respondents use to get their news. This figure tells us that 28.1 percent of respondents surveyed get their news primarily from television, while 53.8 percent use the Internet. This makes up the majority of the GSS sample. Only 17.8 percent of respondents get their news from sources other than the Internet or Television.

[insert figure 2]

Figure 2 shows the amount of time respondents spend online every day. We can see that, of the respondents in this study's sample, the majority spend less than 1 hour per

day on the Internet. The mean amount of time spent online is about 1.8 hours per day

with a standard deviation of about 2 hours (see table 1).

[insert figure 3]

Figure 3 depicts the amount of time respondents spend watching television per

day. Looking at this chart, we see that the vast majority of respondents (92 percent)

spend between 0 and 6 hours watching television per day. The mean amount of time

spent watching television within this sample is 2.8 hours (see table 1). It is also notable

that among the sample of this study more people spend 0 hours watching TV than spend

0 hours online per day.

[insert figure 4]

Independent Variables. Figure 4 displays the levels of confidence respondents

have in the media. The mode of this data set is 1, or having hardly any confidence in the

media. This group makes up 35 percent of the total distribution. On the interval scale of

1-3, the mean response is more or less directly between 1 and 2, with a standard deviation

of roughly .5 (see table 1). Only 3 percent of respondents reported having the highest

level of confidence in the media.

[insert figure 5]

Respondents' confidence in government is displayed in figure 5, where it is

shown that the majority of respondents (60.8 percent) are less than confident in the

government. The modal group in this figure indicates a higher level of confidence in

government than in media, being positioned at 2 out of 3. This group makes up nearly a

quarter (24 percent) of the total responses. The mean confidence level is 1.7 (see table

1).

[insert figure 6]

Control Variables. The political views of the respondents are expressed in figure

6. Here we can see a fairly even distribution of political views that just barely skews

towards conservatives, with the mean coming out to just above 4–the value for moderate

(see table 1). The largest group is the moderate group, making up 36 percent of the total

distribution.

[Insert figure 7]

Figure 7 shows the educational attainment of the respondents. This skews

towards the more educated, with an average educational attainment of 14 years with a

standard deviation of 2.8 years (see table 1). The largest group, however, is the group of

people who finished high school (12 years) and did not attend college. This group makes

up 26 percent of the total sample.

[insert figure 8]

The age distribution in figure 8 shows a distribution of ages that skews young.

This is to be expected within this sample, as access to a computer/Internet is a

requirement within this sample. However, the distribution still shows a sizable

proportion of older respondents, and the mean age is 44 (see table 1).

[insert figure 9]

The results in figure 9 show a considerably larger number of women in the sample (64 percent female) than men, while the race statistics in figure 10 display a roughly 3:1 ratio of white people to people of color (~74-26 percent).

[insert figures 10 and 11]

Figure 11 presents the relative income of the respondents' families at the time that the respondent was 16 years old. Here, the largest group (at 40 percent) reported having an average income. The overall results skewed poorer, with 34 percent of respondents reporting that their income was below or far below average.

[insert figure 12]

Descriptive Statistics

From the descriptive statistics in table 1 we can get a brief overview of our sample as a whole. Our sample is predominantly white (75 percent) and female (64 percent), with an average of two years of college attended (14 years of school completed) with a standard deviation of 2.8 years. The average respondent is 44 years old with a standard deviation of 17 years. Most of the respondents grew up in families that had average or below average incomes, and they are just barely more conservative than they are liberal, although the standard deviation (1.4) prohibits us from making the same claim about the greater population. On average, the respondents watch 3 hours of television per day with a standard deviation of 2.4 hours. They spend an average of 1.8 hours per day online with a standard deviation of 2 hours. They exhibit low levels of confidence in the government and the media, while remaining slightly more confident in the former, with standard deviations of roughly .5 each.

[insert table 1]

Bivariate Findings

A bivariate correlation matrix (see table 2) including all non-nominal variables (dummied nominal variables were included) shows a number of significant correlations across the variables used in this study. The two dependent variables, confidence in media and government, are positively correlated with each other with a moderate strength of .295, which is statistically significant at the $p < .01$ level. Additionally, there is a weak negative correlation between conservatism and confidence in government that is also significant at the $p < .01$ level. There is also a weak negative correlation between age and confidence in government, though this is only significant at the $p < .05$ level, and data from a multiple regression test (table 3) shows that this relationship is moderated by conservatism.

There is a weak positive correlation between hours of TV watched per day and confidence in media that is significant at the $p < .01$ level, though no such significant correlation was found between daily hours of Internet use and confidence in media. However, a weak negative correlation was found showing that those who get their news primarily from the internet have a lower level of confidence in the media. As with confidence in government, there is a weak negative correlation between conservatism and confidence in media, though this correlation is only significant at the $p < .05$ level. No other significant correlations involving the dependent variables were found.

Amongst the independent and control variables, various significant correlations were found. Many of the control and independent variables partially explained patterns in media consumption. For example, it is shown through a moderate relationship that older people are considerably more likely to get their news from television (.358 at $p <$

.01) than from the Internet (-.467 at $p < .01$). A weaker but still significant coefficient also shows that older people are more likely to spend more time watching television on a daily basis than young people ($p < .05$), and a moderate negative correlation shows they are significantly less likely to spend time online ($p < .01$). There is also a weak correlation showing that conservatives are more likely to get their news from television (.112 at $p < .05$) than from the internet (-.164 at $p < .01$). Additionally, a weak correlation shows that older people are more likely to be more conservative ($p < .01$). Weak coefficients also show that people who had above average family incomes at the age of 16 and people who received more education are less likely to get their news from television, and more likely to use the Internet as their primary news source ($p < .01$). People who had higher family incomes at 16 are also more likely to have a better education (.166 at $p < .01$). People who have completed more years of school are also less likely to watch as much television on a daily basis, as indicated by a weak negative coefficient significant at the $p < .05$ level, and are more likely to spend time online (.114 at $p < .05$). Weak correlations show that those who get their news from the internet are less likely to watch as much television and that those who do get their news primarily from television are more likely to watch more television, which should come as no surprise. The same is significant in the inverse for those who get their news from the Internet. There is also an incredibly strong negative correlation between people who get their news from television and from the internet, noting another unsurprising inverse relationship that simply states that those who get their news primarily from the internet do not get their news primarily from television and vice versa.

Weak correlations show that people of color are more likely to get their news from the Internet ($p < .05$), and less likely to have a high family income at the age of 16 and greater educational attainment ($p < .01$). A different weak negative correlation shows that people of color are also generally younger than white people ($p < .01$), a phenomenon that will be discussed more later. Older people generally give lower self-reported family incomes at age 16 (-.135 at $p < .01$) and generally received more years of education (.114 at $p < .05$).

[insert table 2]

Multivariate Findings

A regression of confidence in media and government on all variables (table 4) shows that the variables used in this study explain a small but notable percentage of variation in the two dependent variables.

Confidence in Media. The variables in the regression of confidence in the media explain 6.4 percent of the variation in the dependent variable ($R^2 = .064$). While this is not substantial, it is significant. The regression itself is statistically significant ($F = 2.454$, $p < 0.01$). Within the regression, three variables are shown to have significant effects on confidence in media. A positive coefficient shows that the more time an individual spends watching television on a daily basis, the higher their confidence in the media will be ($\beta = .144$, $p < .01$). In contrast, those who get their news from the Internet are likely to have less confidence in the media ($\beta = -.153$, $p < .05$). Finally, the regression shows that the more conservative someone is, the less confidence they will have in the media ($\beta = -.137$, $p < .01$).

Confidence in Government. The regression of confidence in government on all variables shows that the variables used explain 5.9 percent of the variation in confidence in government ($R^2 = .059$). This only explains a very small fraction of the variance in the confidence in government variable. This regression is also significant ($F = 2.245, p < .05$). Conservativeness is the only significant variable in this model, indicating that the more conservative somebody is, the less confidence they will have in government ($\beta = -.150, p < .01$). This coefficient also shows that conservativeness has a larger effect on confidence in government than it does on confidence in media.

It should also be noted that the regression shows no significant effect of age on confidence in media, despite a significant weak negative correlation found between the two variables in the bivariate analysis (table 2).

[insert table 4]

DISCUSSION

The results of this study provide a muddled picture in relation to the original hypotheses and theory. In keeping with the minimal effects theory, it was shown that social group membership has a higher influence on confidence in media and government than exposure to media does. This is evident in the relatively large effect the conservativeness had on confidence in media ($\beta = -.137, p < .01$) and government ($\beta = -.150, p < .01$; table 4). This data, along with the lack of significant effects of hours online in both regressions and time spent watching television in the regression of confidence in government, is good evidence for the argument for minimal effects, in that pre-conceived political views are affecting confidence more than exposure to news. This could be indicative of the obsolescence of mass media and the ability for anyone to find and stick

with news sources that conform to their ideas (Morris 2007; Bennett and Iyengar 2008; Flaxman et al. 2016).   As for the positive significant relationship between daily television use and confidence in the media, it is possible that the inclusion of the confidence in television variable in the computed confidence in media variable modified that relationship considerably. If an analysis was done again only using the confidence in the press variable, it is possible that the outcome might be different. It is also important to remember that confidence in television is not a variable exclusive to TV news.

Further evidence of the changing face of media effects lies in the significant negative relationship between getting news from the Internet and confidence in the media (β = -.153, p < .05; table 4). This relationship suggests that more exposure to more varied news sources will lead to increased skepticism of the news available. This idea is supported by the research outlined previously (Bennett and Iyengar 2008; Flaxman et al. 2016).

The lack of significant relationships between the dependent variables and confidence in government provides an interesting mix of confirmation and contradiction of previous studies. In the research, multiple studies made claims to the fact that increased media exposure would decrease confidence in government (Budak et al. 2016; Fowler and Gollust 2015; Flaxman et al. 2016). However, there are no relationships between media consumption and confidence in government, which aligns with the minimal effects theory that media has less of an effect, specifically in the modern day (Bennett and Iyengar 2008; Gunther 1992; Morris 2007). The relatively strong negative relationship between conservativeness and confidence in government (β = -.150, p < .01; table 4) further reinforces this theory (figure 13).

The negative relationship between age and confidence in government seen in the bivariate analysis (table 2) is not present in the regression (table 4). This suggests that age is mediated by conservatism in its relationship with confidence in government, given the positive correlation between age and conservativeness. It is also important to keep in mind that these shifts in confidence are relative to a fairly low mean confidence in both institutions (table 1).

Second Regression Model Using Confidence in Press

While reflecting on this study, it became apparent that the decision to combine the confidence in television and confidence in press variables may have been counterproductive to answering the research questions addressed in this study. For this reason, the confidence in media variable was replaced with the confidence in press variable, and the bivariate correlation and regression analysis were repeated. These tables yielded results that were significantly more interesting and informative that the initial tests. Specifically, looking at the regression model (table 5), there are two more significant variables. This model shows that women are less confident in the media, which validates previous research (Shor et al. 2015). Furthermore, the model shows that people of color have more confidence in the media. This regression model also explains roughly two percent more of the variation in confidence in press than previously noted for confidence in media. The regression itself was also significant at a higher significance level of $p < .001$, an unusually high significance level for such a small sample size. The standardized coefficient for conservatism in the new model jumped from $\beta = -.137$ at $p < .01$ (table 4) to $\beta = -.211$ at $p < .001$ (table 5). These new data provide much stronger support for the new minimal effects theory that social groups are

more important than media exposure in forming ideologies and opinions (Bennett and Iyengar 2008).

CONCLUSION

 The original aim of this study was to explore possible relationships between media exposure, primary source of news, and confidence in media and government. It was hypothesized that increased media exposure would lead to lack of confidence in these institutions. It was further hypothesized that those who primarily received their news from the Internet would be less confident in these institutions than those who received their news primarily from television. Using a subset of 2016 GSS data, negative relationships were found between conservativeness and both independent variables and internet news and confidence in media. A positive relationship was found between daily consumption of television and confidence in media. From these results, we can reject the first hypothesis. However, the negative relationship between Internet news and confidence in media partially validates the second hypothesis. This relationship, when compared to the positive relationship between television consumption and media confidence, proves that Internet news has a greater detrimental effect on confidence in institutions than television news.

These findings partially support the minimal effects theory in the sense that demographics have a greater influence on confidence than exposure to media. However, this result is limited to the institution of media, and therefore cannot be confidently used to make further claims. What can be implied by these data is that some of the aspects of the new theory of minimal effects (Bennett and Iyengar 2008) in the face of online news

are valid. However, the second regression model (table 5) that uses confidence in press in place of confidence in media is far more informative and supportive of new minimal effects. Here we see significant relationships between three significant relationships between demographic variables and confidence. This contributes empirical evidence to the theory that social group membership is more important than media exposure (Lazarsfeld et al. 1948; Bennett and Iyengar 2008).

Limitations

There were many limitations of this study that made it difficult to get precisely relevant data and strong results. First, the General Social Survey is not a media survey. Therefore, the questions used were not as specific as they could have been. Second, the general nature of the GSS means that the number of people who answered all of the questions used in this study was small. A sample size of 370 respondents combined with questions that were not specific enough to the subject mean that this study is extremely limited in its ability to suggest broader social implications. Further research on this topic should be done with more appropriate surveys containing more questions specifically pertaining to media use and news consumption. Based on the results, it would also be wise to include more demographic variables pertaining to social group affiliation in follow-up studies. Further research should also take chronological progression into account, as certain elements of the theory in this paper suggest that the magnitude of the effect of different variables may change over time as society changes. Using data from different decades/years may be useful in explaining the changing nature of media effects.

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Table 1. Descriptive Statistics for All Variables (*n* = 370)

	Minimum	Maximum	Mean	Std. Deviation
Confidence in Government	1	3	1.69	.473
Confidence in Media	1	3	1.56	.527
Hours per Day Watching TV	0	20	2.78	2.485
Hours per Day Online	0	12.14	1.78	2.089
News from TV	0	1	.28	.451
News Source	1	3	1.89	.673
Political Views (Conservative)	1	7	4.02	1.453
Age	18	89	44.28	17.103
Female	0	1	.64	.48
People Of Color	0	1	.25	.436
Income at 16	1	5	2.86	.973
Education	2	20	14.1	2.815

Table 2. Correlations Between Confidence in Media, Confidence in Government, and All Other Variables (Listwise Deletion, Two-Tail Significance Test, *n* = 370)

	Confidence in Media	Hours per Day Watching TV	Hours per Day Online	News from Internet	News from TV	Conservative	Age	Female	People of Color	Income at 16	Education
Confidence in Government	.295**	-.093	-.014	.067	-.066	-.169**	-.125*	.025	.080	.034	.070
Confidence in Media		.152**	-.021	-.112*	.085	-.109*	.022	-.061	.084	-.012	-.017
Hours per Day Watching TV			-.028	-.141**	.184**	.062	.116*	.011	.059	.016	-.126*
Hours per Day Online				.247**	-.230**	-.075	-.295**	-.007	.012	-.051	.114*
News from Internet					-.679**	-.164**	-.467**	-.050	.130*	.181**	.138**
News from TV						.112*	.358**	.059	.004	-.172**	-.145**
Conservative							.177**	-.014	-.012	-.069	-.025
Age								.032	-.214**	-.135**	.114*
Female									-.029	-.058	.042
People of Color										-.138**	-.146**
Income at 16											.166**

p < .05; ** *p* < .01

Table 3. Correlations Between Confidence in Press, Confidence in Government, and All Other Variables, Listwise Deletion, Two-Tail Significance Test (*n* = 370)

	Confidence in Press	Hours per Day Watching TV	Hours per Day Online	News From Internet	News From TV	Conservative	Age	Female	People of Color	Income at Age 16	Education
Confidence in Government	.259**	-.093	-.014	.067	-.066	-.169**	-.125*	.025	.080	.034	.070
Confidence in Press		.112**	-.003	-.102*	.066	-.176*	.068	-.103*	.075	-.007	-.029
Hours per Day Watching TV			-.028	-.141**	.184**	.062	.116*	.011	.059	.016	-.126*
Hours per Day Online				.247**	-.230**	-.075	-.295**	-.007	.012	-.051	.114*
News From Internet					-.679**	-.164**	-.467**	-.050	.130*	.181**	.138**
News From TV						.112*	.358**	.059	.004	-.172**	-.145**
Conservative							.177**	-.014	-.012	-.069	-.025
Age								.032	-.214**	-.135**	.114*
Female									-.029	-.058	.042
People of Color										-.138**	-.146**
Income at Age 16											.166**

* *p* < .05, ** *p* < .01

Table 4. Regression of Confidence in Media and Government on All Variables (*n* = 370)

Variable	Confidence in Media	Confidence in Government
	β	β
Hours per Day Watching TV	.144**	-.067
Hours per Day Online	-.004	-.067
News from Internet	-.153*	-.046
News from TV	-.015	-.030
Conservative	-.137**	-.150**
Age	-.019	-.114
Female	-.070	.025
Person of Color	.094	.079
Income at 16	.002	.006
Education	.036	.090
R^2	.064	.059
$F_{(10, 359)}$	2.454**	2.245*

*$p < .05$; **$p < .01$

Table 5. Regression of Confidence in Press and Government on All Variables (*n* = 370)

Variable	Confidence in Press β	Confidence in Government β
Hours per Day Watching TV	.106*	-.067
Hours per day Online	-.030	-.067
News From Internet	-.151*	-.046
News From TV	-.032	-.030
Conservative	-.211***	-.150**
Age	.063	-.114
Female	-.114*	.025
Person of Color	.105*	.079
Income at 16	.006	.006
Education	.061	.090
R^2	.088	.059
F(10, 359)	3.465***	2.245*

*p < .05; **p < .01; ***p < .001
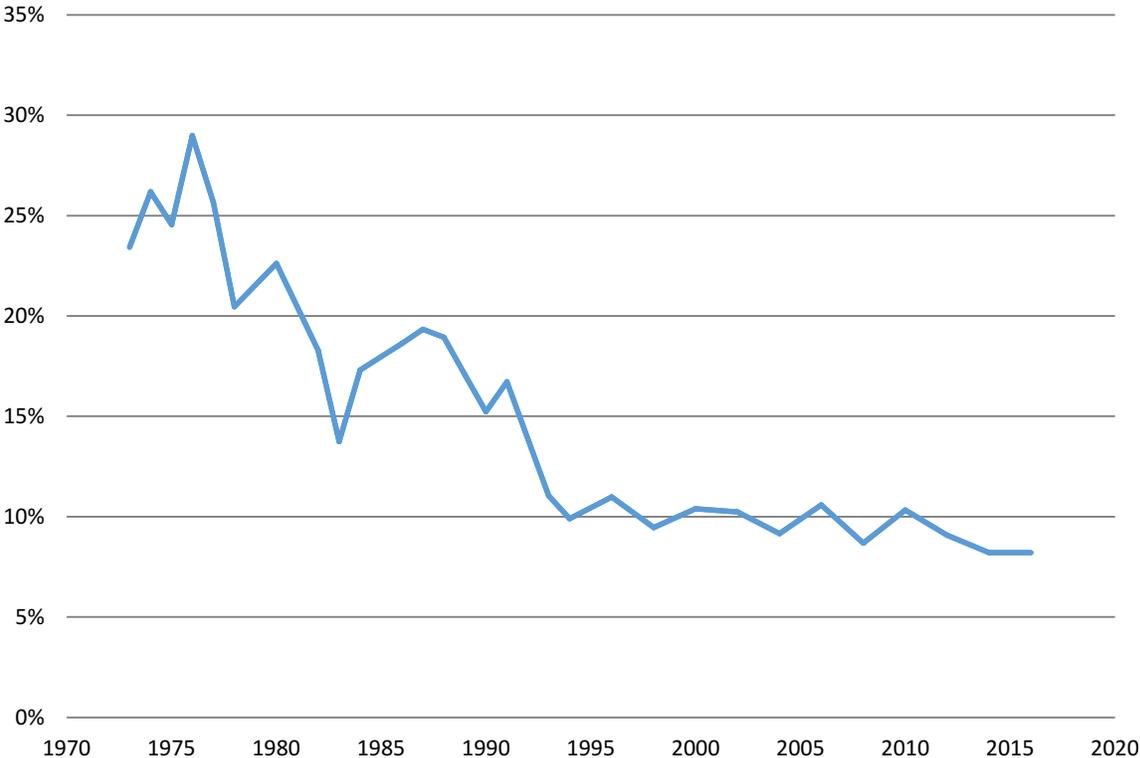
Figure 1. Confidence in the Press (1973-2016)
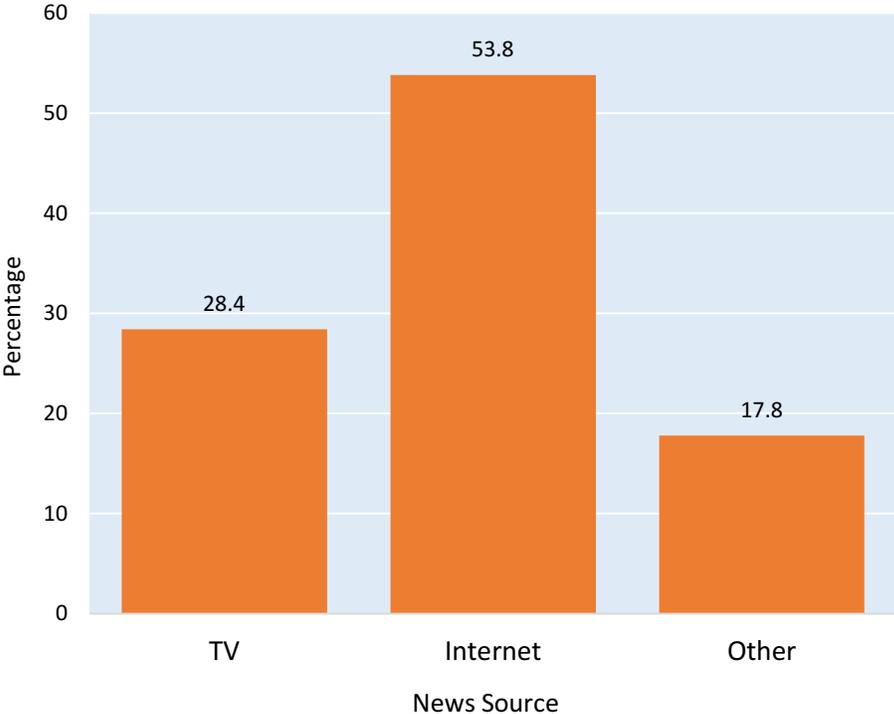
Figure 2. Histogram of Respondent's Primary Source of News

Figure 3. Histogram of Time Spent Online per Day

Figure 4. Histogram of Time Spent Watching TV per Day
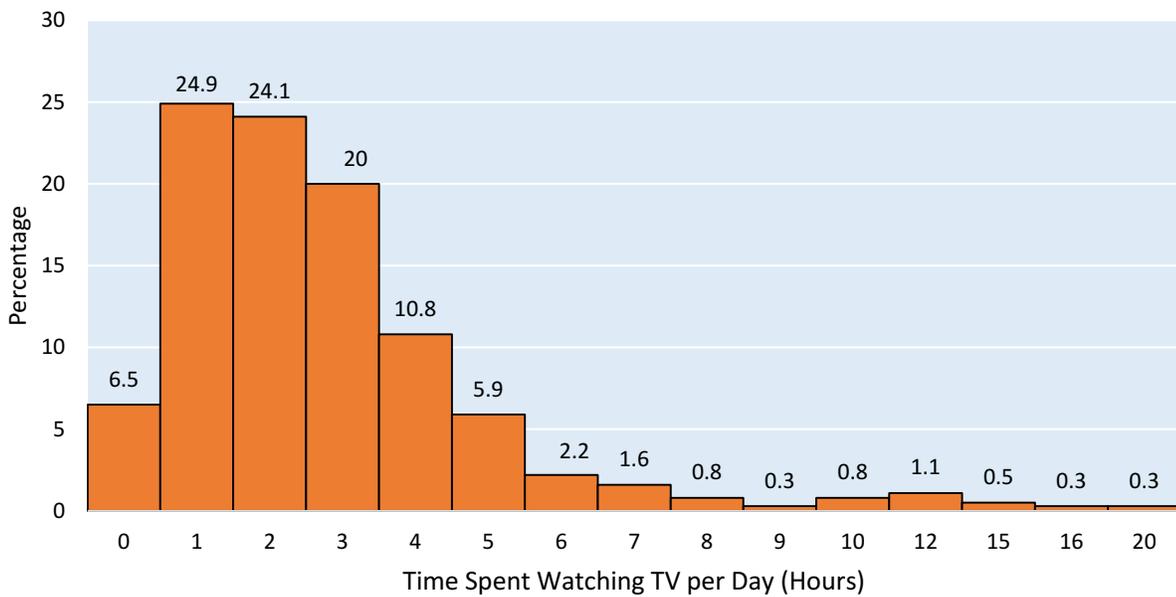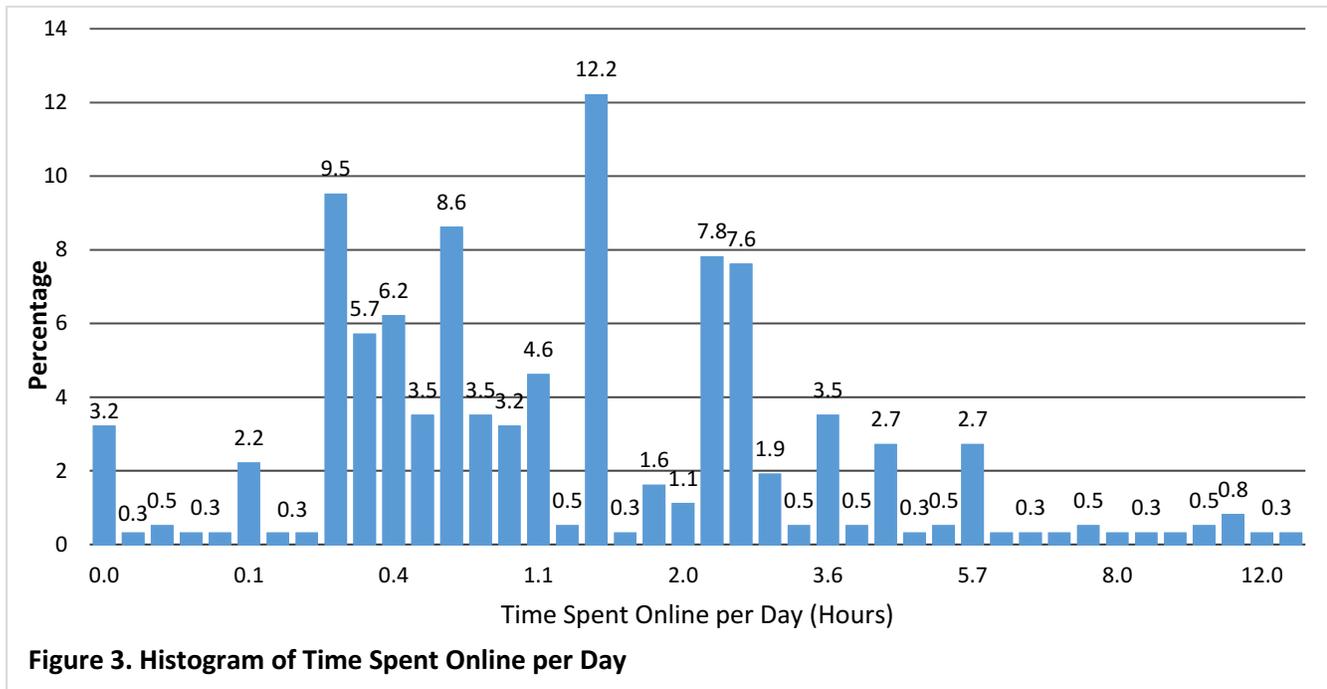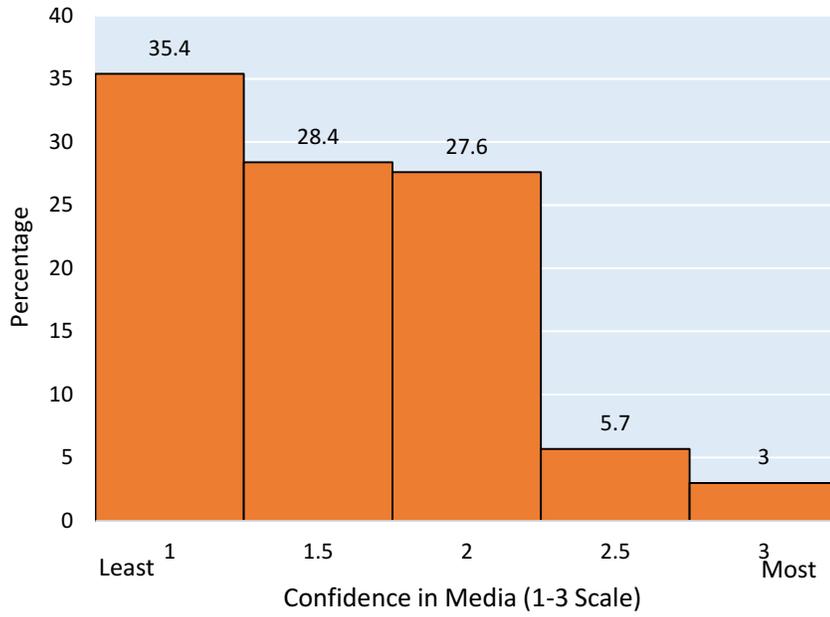
Figure 5. Histogram of Confidence in the Media
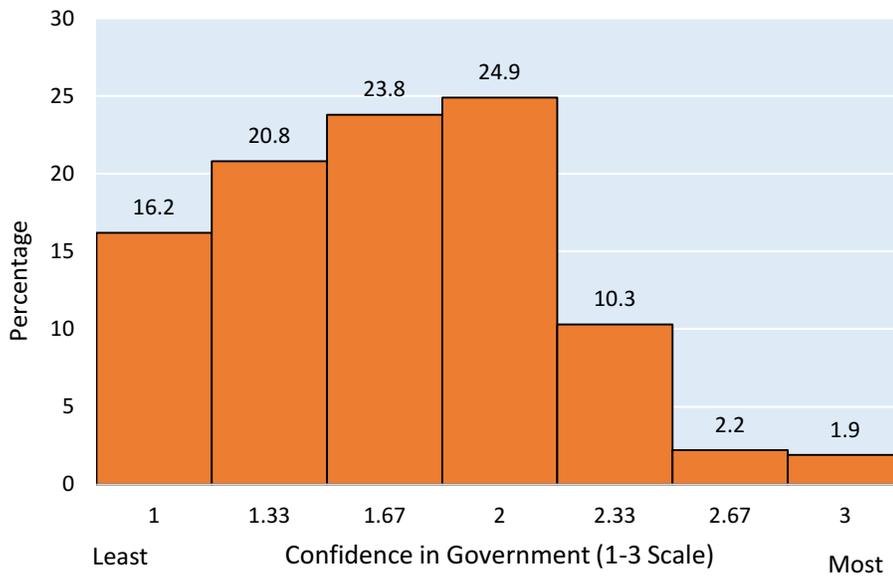
Figure 6. Histogram of Confidence in Government
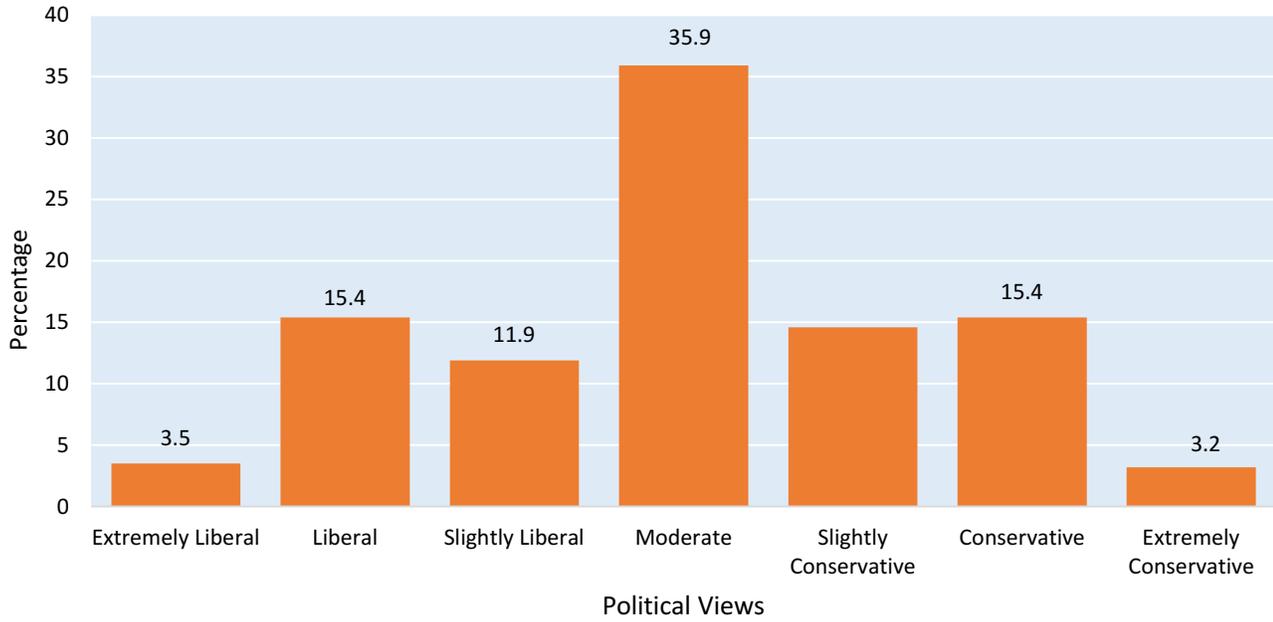
Figure 7. Histogram of Political Views
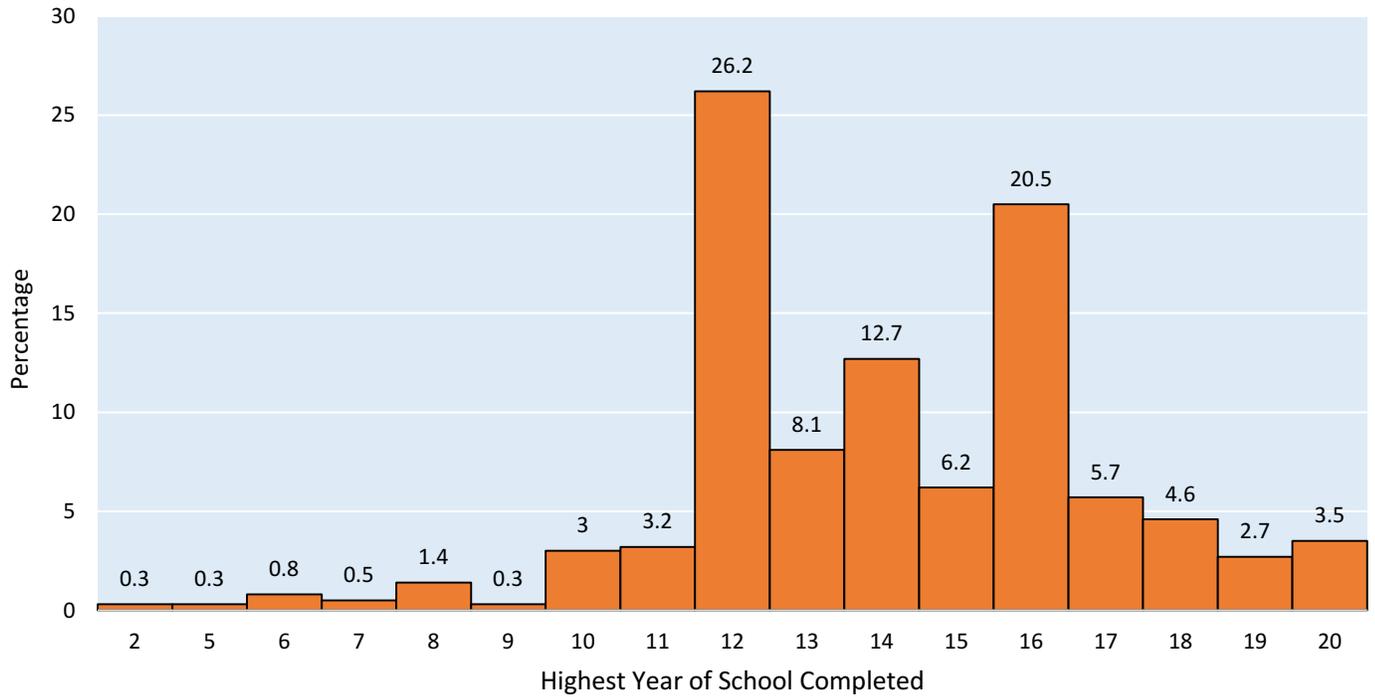
Figure 8. Histogram of Educational Attainment
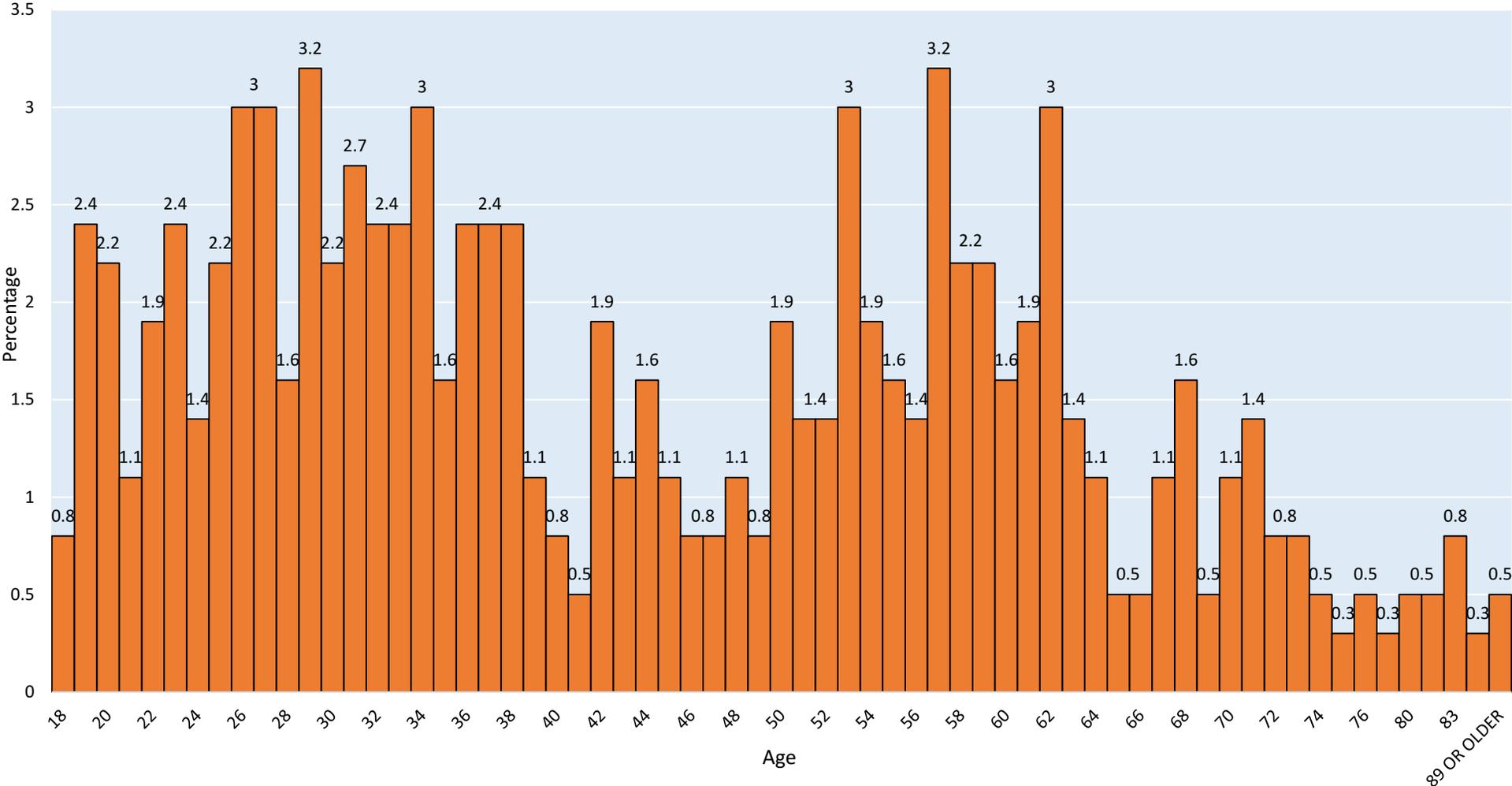
Figure 9. Histogram of Age
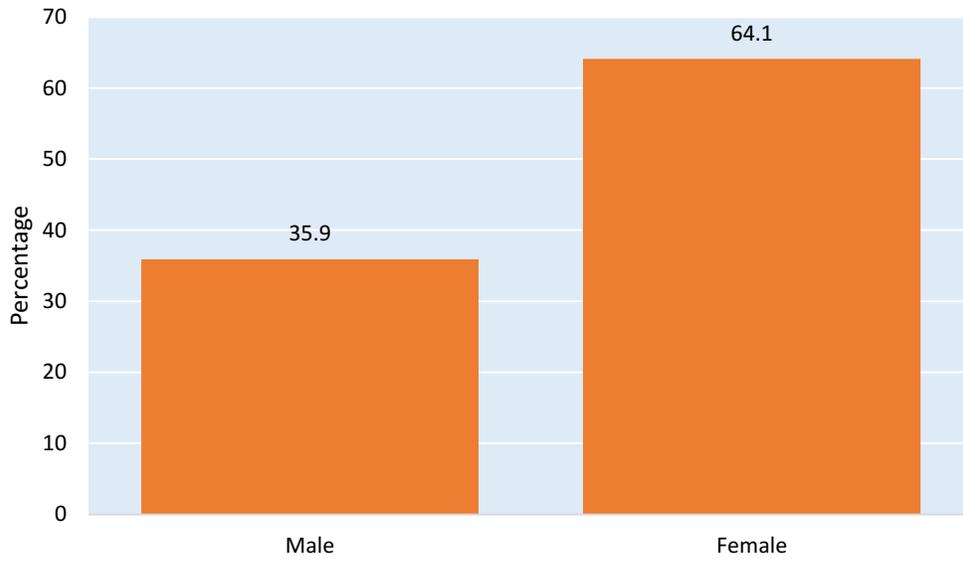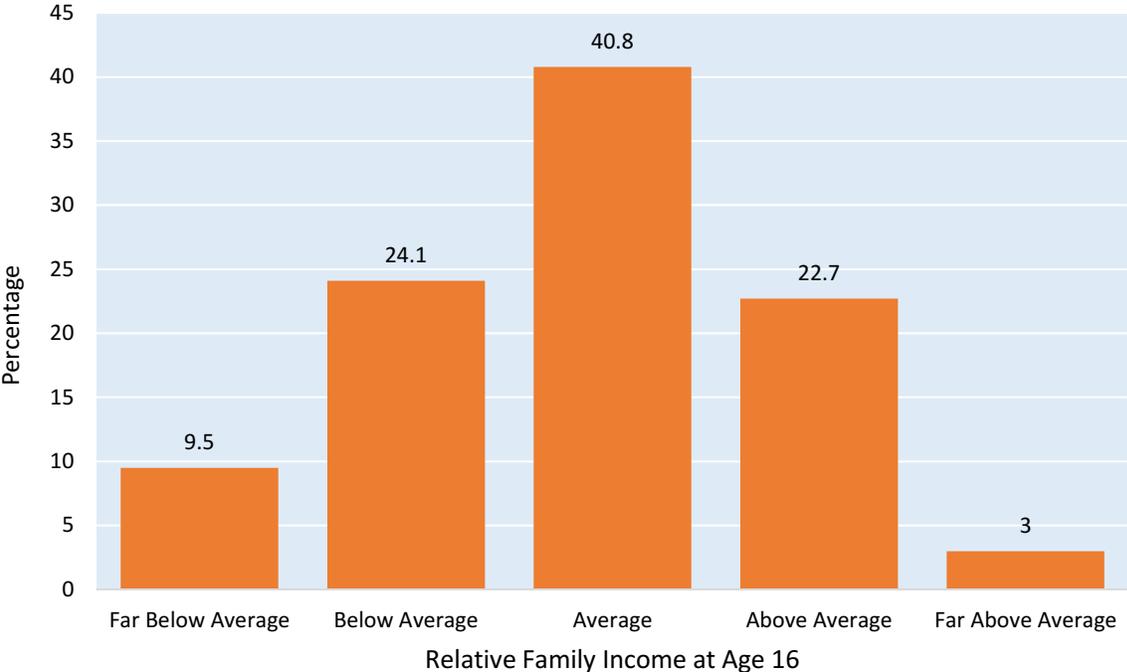
Figure 10. Histogram of Sex
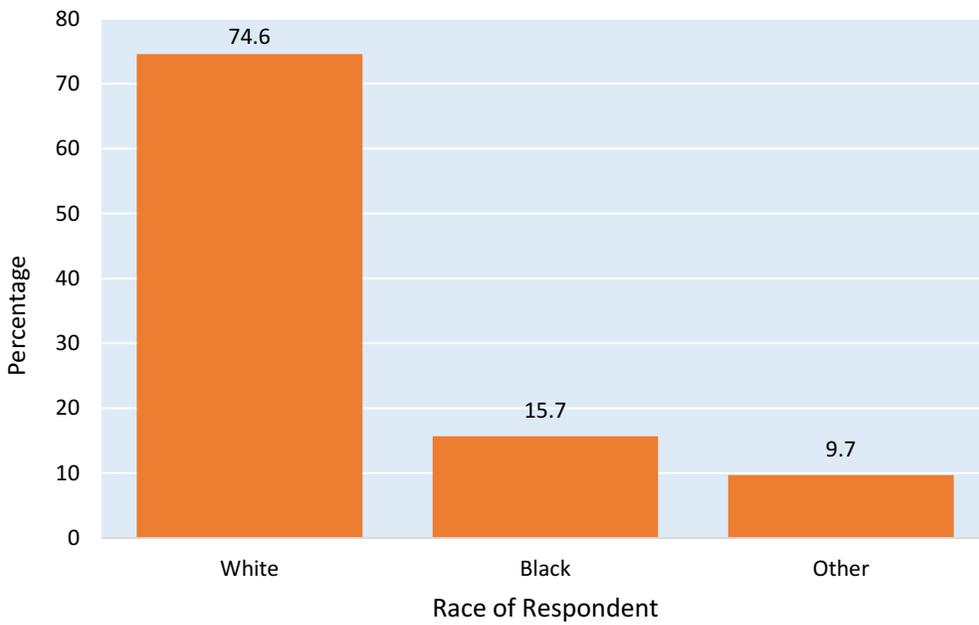
Figure 11. Histogram of Race

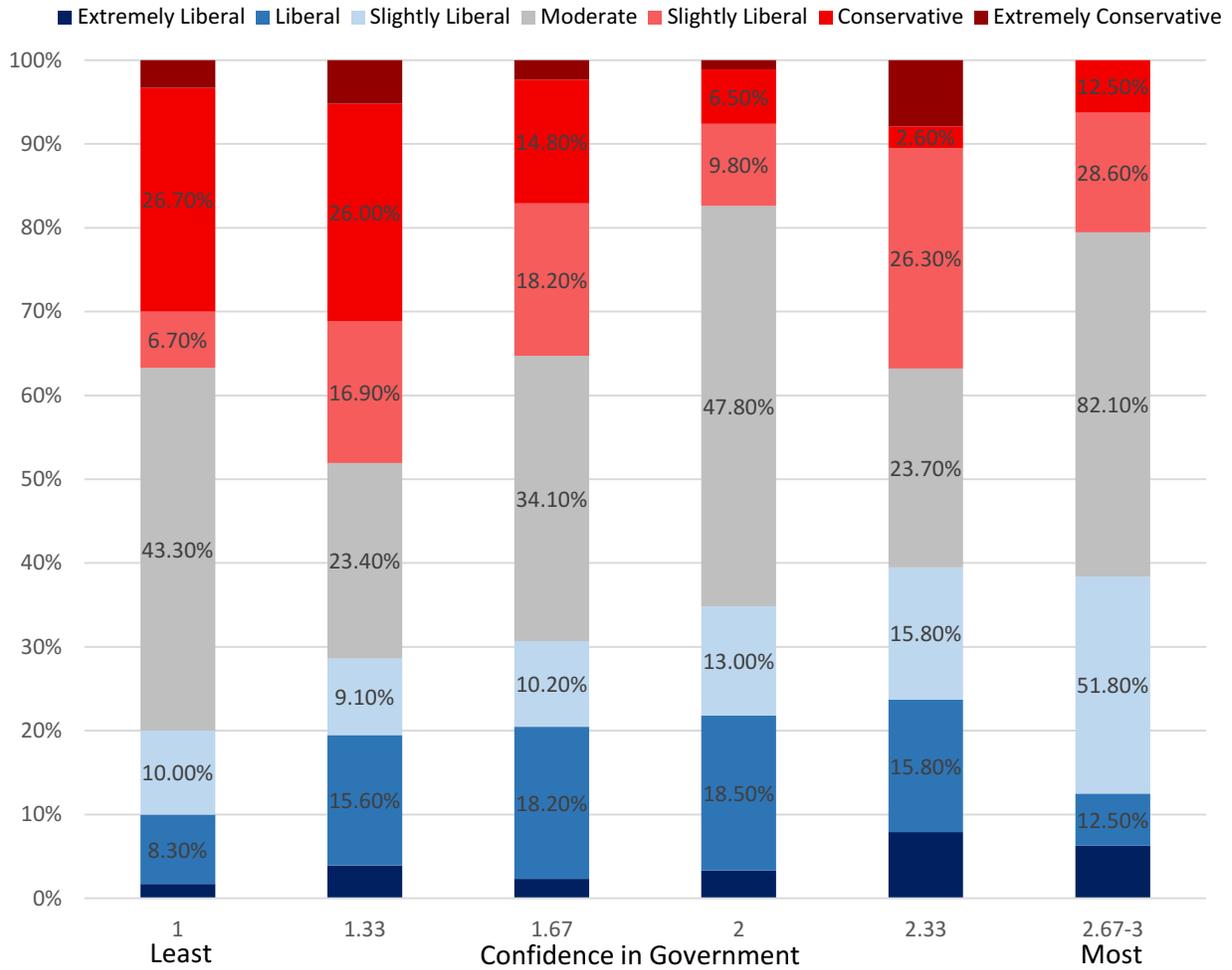**Figure 12. Histogram of Relative Family Income at Age 16**

Figure 13: Confidence in Government by Political Views Crosstabulation